Remarks

The undersigned would like to thank the Examiner for the interview conducted on May 4, 2005, and the Interview Summary he prepared and mailed on May 24, 2005.

As amended, Claims 1, and 18-36 are pending in the Pending Application. Claim 1 has been amended and Claims 18-36 have been added. Claims 18-36 are supported by the Pending Application, including the drawings and claims, as filed. No new matter has been added. Claim 1 stands rejected.

A. Rejection of Claim 1

The Examiner has rejected Claim 1 under 35 U.S.C. §103(a) as being unpatentable over U.S. patent no. 6,047,195 ("Nakanishi") in view of U.S. patent no. 6,094,587 ("Armanto") and U.S. patent no. 6,751,446 ("Kim"). In particular, the Examiner states that Nakanishi discloses a portable telephone with (i) a receiving speaker (20) that outputs both conversation and acoustic sound, which reads on the claimed "first speaker," (ii) a calling sound speaker (22) that reads on the claimed "second speaker" for outputting sound, and (iii) a CPU (23) that reads on the claimed "controller." In addition, the Examiner maintains that a memory for storing data relative to ringtone and music sound was known in the art, as taught by Armanto. Further, the Examiner states that Kim discloses speakers being placed on opposite ends.

Claim 1 has been amended to eliminate the following limitations: (a) a circuit board, (b) mounting the first speaker to the circuit board (c) the first speaker being adapted to be placed adjacent a user's ear when the user converses on the phone; (d) mounting the second speaker to the circuit board, (e) a space separating the first and second speakers so that they may cooperate to implement a stereophonic effect for the sound, and (f) a first and second switching in the controller for controlling the output of the first and second speakers according to a sound setting selected before hand.

It is respectfully submitted that the Examiner has failed to establish a prima facie case of obviousness because he has failed to show that the cited references teach every limitation of the rejected claims. MPEP § 2142 citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). More specifically, the Examiner has failed to show that the cited references teach or

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suggest (a) a first speaker configured to selectively output the received speech or the sound; and (b) a controller configured to selectively communicate the received speech to the first speaker, the sound to the first speaker, or the sound to the first and second speakers simultaneously.

Nakanishi teaches a portable telephone, primarily a personal handy phone, which can receive a call from a public base station (a cell) or a base station of a home telephone (Nakanishi, column 1, lines 6-10). The disclosure in Nakanishi is directed to automatically controlling the volume of the phone according to whether the phone is receiving a call from the public or the home base station (Nakanishi, columns 1 and 2, lines 52-67 and 1-3, respectively). The phone disclosed in Nakanishi (the "Nakanishi phone") includes a receiving speaker 20 connected to a first amplifier 19, and a calling sound speaker 22 connected to a second amplifier 21 (Nakanishi, Figure 1). The Nakanishi phone further includes an antenna 1 through which the Nakanishi phone receives a signal (the "reception signal" or "receiving speech signal"). The Nakanishi phone outputs the receiving speech signal via the first amplifier 19 and the receiving speaker 20 (Nakanishi, column 3, lines 14-18). In addition, the Nakanishi phone outputs a ring tone or "calling sound" from the calling sound speaker 22 through the second amplifier 21 (Nakanishi, column 3, lines 45-46). The Nakanishi phone further includes an operating portion 24 and a CPU 23 that automatically set the volume of the receiving speech sound and the calling sound (Nakanishi, columns 3-4, lines 50-60 and lines 1-6, respectively). The operating portion 24 sets the volume of the received speech signal by adjusting the amplification of first amplifier 19 and the volume of the calling sound by adjusting the amplification of the second amplifier 21 (Nakanishi, column 3, lines 50-60).

Nakanishi does not disclose a first speaker configured to selectively output the received speech or the sound. In every instance in which the output of the receiving speaker 20 is discussed, the receiving speaker 20 is described as outputting a signal received from a public base station or a home base station (the receiving speech signal) (see Nakanishi, column 3, lines 3-5). Further, every instance discussing the output of the ring tone (the calling sound) discloses that this sound is output from the calling sound speaker 22. Each instance in which the respective outputs of the receiving speaker 20 and the calling sound speaker 22 are discussed in Nakanishi are summarized in the Table 1 below:

"A reception signal received by antenna 1 The	Column 3, lines 3-
demodulated reception signal is outputted as	18.
sound from the receiving speaker 20 through the	
amplifier 19. [emphasis added]	
"A calling sound is outputted from the calling	Column 3, lines 45
sound speaker 22 through the amplifier 21."	-46.
"Upon arrival of a call, the CPU 23outputs the	Column 4, lines 23-
calling sound out of the calling sound speaker 22	30.
through the <i>amplifier 21</i> The calling sound is	Column 4, lines 41-
outputted until off-hook [the phone is	48.
answered]and stops the output of the calling	
sound at the time of off-hook" [emphasis	
added]	
"Next [after a call is received and the phone is	Column 4, lines 30-
"off-hook"] talk [received speech] is made	33.
through the receiving speaker 20 and the amplifier	Column 4, lines 48-
19." [emphasis added]	51.

Table 1

There is simply no section of Nakanishi that discloses a speaker configured to selectively output received speech and stored sound. The sections cited by the Examiner as disclosing this element (Nakanishi, col. 3, lines 14-18, 45-50, and Fig. 1) make no such disclosure. The disclosure in Nakanishi, column 3, lines 14-18 states that a signal received by antenna 1 (a reception signal) is output by the receiving speaker 20 through the amplifier 19. The disclosure in Nakanishi, column 3, lines 45-50 states that a "calling sound is outputted from the calling sound speaker 22 through the amplifier 21." Thus, these sections teach only that the receiving speaker 20 outputs a received signal, and that the calling sound speaker 22 outputs a calling sound (ring tone). Further, Figure 1 of Nakanishi shows a block diagram of the phone but does not show the reception signal, the calling sound, or the path either of these signals takes through the Nakanishi phone. Therefore, the Examiner has not shown any section in Nakanishi that teaches a speaker configured to selectively output received speech and stored sound.

In addition, Nakanishi does not disclose a controller configured to selectively communicate (i) the sound to the first and second speakers simultaneously, (ii) the sound to the first speaker, (iii) the received speech to the first speaker, and (iv) the sound to the second speaker. The sections cited by the Examiner as disclosing this element (Nakanishi, col. 3, lines 50- col. 4, line 6, and Fig. 1 and 2) make no such disclosure. The disclosure in Nakanishi,

column 3-4, lines 50-67, and 1-6, respectively, teaches using the operating portion 24 and the CPU 23 to set the amplification level of the amplifier 19 connected to the receiving speaker 20 and the amplifier 21 connected to the calling sound speaker 22. As previously stated, Figure 1 of Nakanishi shows a block diagram of the phone but does not show the reception signal, the calling sound, or the path either of these signals takes through the Nakanishi phone. In addition, the CPU 23 and the operating portion 24 are each represented merely by a block in connected to other components of the phone, and does not provide any other information about the CPU 23 or the operating portion 24. Figure 2 "is a flow chart showing a method to set the volumes of a calling sound and a receiving speech sound automatically" (Nakanishi, column 2, lines 49-51), as does the text associated with Figure 2 (see Nakanishi, column 4, lines 9-67). As shown in Table 1, this portion of the specification teaches that the CPU 23 "outputs the calling sound out of the calling sound speaker 22 through the amplifier 21..." when the phone receives a call, "stops the output of the calling sound," when the phone is answered ("off-hook"), and causes the received speech ("talk") to be made through the receiving speaker 20 and the amplifier 19 (Nakanishi, column 4, lines 23-30, and lines 41-48, [emphasis added]). However, the CPU 23 in Nakanishi does not communicate the sound to the first speaker, or the sound to the first and second speakers Therefore, it is respectfully requested that the rejection of Claim 1 be simultaneously. withdrawn.

Rejection of Claims 2-17 В.

As with regard to Claim 1, the Examiner has rejected Claim 2 under 35 U.S.C. §103(a) as being unpatentable over Nakanishi in view of Armanto and Kim. Claim 2 has been cancelled. It is therefore respectfully requested that this rejection be withdrawn.

The Examiner rejects Claims 3-5, 8, 10-12, and 15 under under 35 U.S.C. §103(a) as being unpatentable over Nakanishi in view of Armanto and Kim, and further in view of well known prior art under MPEP §2144.03. Claims 3-5, 8, 10-12, and 15 have been cancelled. It is therefore respectfully requested that this rejection be withdrawn.

The Examiner rejects Claims 9, and 16 under under 35 U.S.C. §103(a) as being unpatentable over Nakanishi in view of Armanto, Kim and well known prior art, and further in view of U.S. patent no. 6,134,455 ("Corkum"). Claims 9, and 16 have been cancelled. It is therefore respectfully requested that this rejection be withdrawn.

The Examiner rejects Claims 6, 7, 13, 14, and 17 under under 35 U.S.C. §103(a) as being unpatentable over Nakanishi in view of Armanto, Kim and well known prior art, and further in view of U.S. patent no. 5,471,518 ("Barber"). Claims 6, 7, 13, 14, and 17 have been cancelled. It is therefore respectfully requested that this rejection be withdrawn.

C. New Claims 18-36

1. Claims 18-36

New Claims 18-36 are distinguishable over the prior art cited by the Examiner (the "cited prior art") for the reasons stated above in connection with Claim 1. Claims 18-32 depend from Claim 1 and thus contain all the limitations of Claim 1. New Claim 33 recites a method for outputting a received speech and a stored sound from a cellular phone, and includes the following steps: "providing a first speaker configured to selectively output the received speech and the sound," and "providing a controller...configured to selectively communicate the received speech to the first speaker, the sound to the first speaker, and the sound to the first and second speakers, simultaneously. Therefore, Claim 33 and its dependent claim, Claim 34, are distinguishable over the cited prior art for the reasons previously presented in connection with Claim 1. New Claim 35 recites a method for outputting speech received by a cellular phone and sound stored by the cellular phone, and includes the following step: "according to a sound setting, outputting the speech from the first speaker, the sound from the second speaker, and the sound from the first and second speakers simultaneously. Therefore, Claim 35 and its dependent claim, Claim 36, are distinguishable over the cited prior art for the reasons stated in connection with Claim 1.

2. Claims 18-32 and 34

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In addition to the reasons indicated above in connection with Claim 1, Claims 18-32 and 34 are further distinguishable over the cited prior art because the cited prior art does not teach "a received speech amplifier and a first sound amplifier in communication with the first speaker for amplifying the received speech and the sound, respectively." In addition, the cited prior art does not provide a motivation to combine the references as suggested by the Examiner. MPEP § 2142 citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In the Office Action, the Examiner expressly acknowledges that "Nakanishi fails to specifically disclose two separate amplifiers connected to said first speaker." However, the Examiner gives Official Notice (pursuant to MPEP §2144.03, "Reliance on Common Knowledge in the Art or "Well Known" Prior Art") of the following assumption: "[s]eparate audio amplifiers based on system requirements (amplification, frequency response) connected to the same output device is well known."

"Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or common knowledge in the art are capable of instant and unquestionable demonstration as being well-known... the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute." MPEP §2144.03 (citing *In re Knapp Monarch Co.*, 296 F.2d 230 (CCPA 1961)). With respect to core factual findings, conclusions cannot simply be reached based on assessments of what is basic knowledge. *Id.* (citing *In re Zurko*, 258 F.3d 1379, 1386). For example, deficiencies of the cited references cannot be remedied by general conclusions about what is "basic knowledge." *Id.* at 1385. If such general conclusions are not supported by specific factual findings and some concrete evidence in the record, the conclusions will not support an obviousness rejection. MPEP §2144.03 (citing *Id.* at 1386).

The assumption made by the Examiner is not the type that may properly be made by taking Official Notice. It is not a fact "capable of such instant and unquestionable demonstration as to defy dispute" because it is impossible to determine whether connecting separate amplifiers to the same output device will satisfy system requirements without knowing what the system requirements are. Any system requirements, including amplification and frequency response, are based on the nature of the problem to be solved and on the solution used to solve the problem. Thus, the system requirements must come from the prior art or the knowledge of one of ordinary skill in the art to which the problem or the solution pertains. The Examiner has not pointed to

any system requirements expressed in Nakanishi that would be met by connecting an amplifier to the receiving speaker 20 in addition to the first amplifier 19 in the Nakanishi phone. If the Examiner maintains or repeats the Official Notice of the foregoing assumption in connection with any of the pending claims, it is respectfully requested that the Examiner provide documentary evidence of the assumption as required by MPEP 2144.04 (C).

In addition, the cited prior art fails to provide the motivation to combine or modify the references as suggested by the Examiner. As discussed in Section A of these Remarks, Nakanishi deals with automatically controlling the volume of a portable phone according to whether the phone is receiving a call from a public or home base station (Nakanishi, columns 1 and 2, lines 52-67 and 1-3, respectively). To accomplish this goal, the Nakanishi phone includes a receiving speaker 20 connected to a first amplifier 19 to output a receiving speech signal, a calling sound speaker 22 connected to a second amplifier 21 to output a calling sound (ring tone), and an operating portion 24 and a CPU 23 to automatically set the volume of the received speech signal and the calling sound (Nakanishi, Figure 1, column 3, lines 14-18, 45-46, 50-60 and column 4, lines 1-6). The CPU 23 searches control channels of a public base station and/or a home base station to determine whether the phone is located in the service area of a public or a home base station (Nakanishi, column 3, lines 35-44). The operating portion 24 sets the volume of the received speech signal according to whether the phone is located in a public service area or a home service area by adjusting the amplification of first amplifier 19 and the volume of the calling sound by adjusting the amplification of the second amplifier 21 (Nakanishi, column 3, lines 50-60). In contrast, the Official Notice taken by the Examiner deals with connecting "[s]eparate audio amplifiers based on system requirements (amplification, frequency response)" to the same output device. However, none of the system requirements of Nakanishi suggest the need to or desirability of connecting a second amplifier to the receiving speaker 20. Therefore, there is no motivation to combine Nakanishi with the Examiner's assumption.

In view of the forgoing arguments, it is respectfully requested that this rejection be withdrawn. However, if the Examiner maintains or repeats the Official Notice of the foregoing assumption in connection with any of the pending claims, it is respectfully requested that the Examiner provide documentary evidence of the assumption as required by MPEP 2144.04 (C).

3. Claims 28-32

In addition to the reasons indicated above in connection with Claim 1 and Claims 18-32 and 34, Claim 28 and its dependent claims, Claims 28-32, are further distinguishable over the cited prior art because the cited prior art does not teach a controller that communicates the sound with the first and second sound amplifiers simultaneously.

In the Office Action, the Examiner expressly states that the cited prior art does not disclose the controller causing a call incoming signal to also be fed to the amplifier connected to the first speaker (Office Action, page 7, first paragraph). In addition, the Examiner gives Official Notice (pursuant to MPEP §2144.03, "Reliance on Common Knowledge in the Art or "Well Known" Prior Art") that "[a]ll of the elements (i.e. amplifiers, speakers) are present in the Nakanishi disclosure to implement a call incoming tone signal to be fed to said conversation/acoustic amplifier (19) connected to said first speaker (20)."

However, on page 10, first paragraph of the Office Action, the Examiner also states that Nakanishi (col. 3, lines 55- col. 4, line 6, and Fig. 2) discloses a controller 23 that causes a sound (stored speech data) to be input into the amplifier 19 connected to the first speaker 20 and the amplifier 21 connected to the second speaker 22. This statement is in direct contradiction with the Examiner's assertion on page 7 of the Office Action that the prior art does not disclose a controller causing a call incoming signal (a sound) to also be fed to the amplifier connected to the first speaker. Therefore, if the Examiner maintains or repeats these rejections in connection with any of the pending claims, it is respectfully requested that the Examiner clarify his position regarding the teaching of the cited prior art.

Claims 28-32 require that the "controller communicates the sound with the first and second sound amplifiers." Claim 28 and its dependent claims 29-32 depend on Claim 18, which indicates that the first sound amplifier is one of two amplifiers (the other being the received speech amplifier) in communication with the first speaker. The Examiner's assumption does not provide this limitation. Therefore, the cited prior art does not teach all the limitations of Claims 28-32.

In addition, the Examiner's assumption that that "[a]ll of the elements (i.e. amplifiers, speakers) are present in the Nakanishi disclosure to implement a call incoming tone signal to be fed to said conversation/acoustic amplifier (19) connected to said first speaker (20)" is not the type that may properly be made by taking Official Notice. It is not a fact "capable of such

instant and unquestionable demonstration as to defy dispute" because the Nakanishi phone

clearly does not include a second amplifier connected with the first speaker 20.

It is therefore respectfully requested that this rejection be withdrawn. However, if the Examiner maintains or repeats this argument in connection with any of the pending claims, it is respectfully requested that the Examiner provide documentary evidence of the assumption as required by MPEP 2144.04 (C).

4. Claims 31 and 32

In addition to the reasons indicated above in connection with Claim 1, Claims 18-32 and 34, and Claims 28-32, Claims 31 and 32 are further distinguishable over the cited prior art because the cited prior art does not teach, a "digital signal processor configured to... generate the sound in a stereophonic fashion," as recited in Claim 31, or a "digital signal processor configured to... generate the sound in a dual monaural fashion," as recited in Claim 32. Generating a sound in a stereophonic or dual monaural fashion requires outputting the sound from at least two speakers simultaneously. Nakanishi does not teach outputting a sound from both the receiving speaker 20 and the calling sound speaker 22 simultaneously. As discussed in Section A of these Remarks, in every instance in which the output of the receiving speaker 20 is discussed, the receiving speaker 20 is described as outputting a signal received from a public base station or a home base station (see Nakanishi, column 3, lines 3-5). Further, every instance discussing the output of the calling sound discloses that this sound is output from the calling sound speaker 22. Thus, the CPU 23 of Nakanishi does not generate sound in either a stereophonic or dual monaural fashion.

It is respectfully requested that this rejection be withdrawn.

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Conclusions

In view of the amendments and remarks set forth in this Amendment and Response to Office Action, it is respectfully submitted that the Pending Application, including Claims 1, and new Claims 18-36, is in condition for allowance. Therefore, it is respectfully requested that the foregoing amendments be entered, and the Pending Application be allowed.

The Examiner is invited to contact the undersigned if such contact would in any way facilitate and expedite the prosecution of this application.

Respectfully submitted,

Date: 6/23/05

Susan D. Reinecke, Reg. No. 40,198

Michael Best & Friedrich LLP

401 N. Michigan Avenue

Suite 1900

Chicago, IL 60611 (312) 222-0800

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